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DAC

PTO/SB/21 (09-04)  
Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	09/977,362
	Filing Date	October 16, 2001
	First Named Inventor	Edward R. BEADLE
	Art Unit	2638
	Examiner Name	Lawrence B. Williams
Total Number of Pages in This Submission	Attorney Docket Number	HAR62 001

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers  <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address  <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Request for Refund  <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences  <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)  <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):  Request for Reconsideration of Patent Term Adjustment
<div>Remarks</div> <p>The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 04-1679</p>		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	Duane Morris LLP		
Signature			
Printed name	Mark C. Comtois		
Date	February 15, 2006	Reg. No.	46,285

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:			
Signature			
Typed or printed name		Date	

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



ATTORNEY DOCKET NO. HAR62 001

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of Edward R. Beadle, et al.

Serial No.: 09/977,362

Art Unit: 2638

Filed: October 16, 2001

Examiner: Lawrence B. Williams

Title: SYSTEM AND METHOD FOR AN IN-SERVICE DECISION DIRECTED  
SIGNAL TO NOISE RATIO ESTIMATOR

**REQUEST FOR RECONSIDERATION OF**  
**PATENT TERM ADJUSTMENT**

The Commissioner of Patents  
Office of Patent Legal Administration  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. § 1.705, Applicant hereby requests reconsideration of the patent term adjustment indicated in the corrected Notice of Allowance mailed February 10, 2006 for the present application.

Applicant submits herewith:

- a. a copy of a Change of Correspondence Address filed with the Office on March 1, 2002 and accompanying post card indicating said filing date of March 1, 2002;
- b. a copy of a Notice of Allowance for the subject application mailed July 5, 2005 by the Patent and Trademark Office to the incorrect address of record; and
- c. a copy of a corrected Notice of Allowance for the subject application mailed February 10, 2006.

## STATEMENT OF FACTS

The undersigned hereby states that the Notice of Allowance mailed from the Office on July 5, 2005 was not received by the practitioner.

Applicant filed a change of correspondence address in the subject application on March 1, 2002. A copy of the change of correspondence address is attached hereto as Exhibit A.

Applicant contacted Examiner Lawrence Williams by telephone in an effort to determine the status of the present application on February 8, 2006. The undersigned was informed by Mr. Williams that a Notice of Allowance was mailed for the subject application on July 5, 2005; however, there was no indication that the application had been abandoned due to failure to pay issue fee.

Mr. Williams further informed the undersigned that the PTO records indicate that the Notice of Allowance of July 5, 2005 was mailed to the incorrect correspondence address of record. A copy of the Notice of Allowance of July 5, 2005 is attached hereto as Exhibit B. The Notice of Allowance of July 5, 2005 indicates on page 3 thereof a patent term adjustment of 758 days.

Mr. Williams stated that the Office would issue a corrected Notice of Allowance for the subject application. A copy of the corrected Notice of Allowance of February 10, 2006 is attached hereto as Exhibit C. The corrected Notice of Allowance indicates on page 3 thereof a patent term adjustment of 758 days.

## REQUEST FOR RECONSIDERATION

Due to the failure of the Office to mail a Notice of Allowance to the correct correspondence address of record under 37 C.F.R. § 1.702(a) and issue a patent within three years of the actual filing date of the application under 37 C.F.R. § 1.702(b), the undersigned hereby requests that the Office reconsider and issue a corrected patent term adjustment of 940 days.

The corrected patent term adjustment of 940 days reflects the original patent term adjustment of 758 days indicated on the Notice of Allowance mailed July 5, 2005 with a further 182 days.

The further 182 days was calculated as follows:

- (1) Pursuant to 37 C.F.R. § 1.703, the Office was required to mail a communication on August 12, 2005, four (4) months after Applicant's paper filed with the Office on April 12, 2005.
- (2) The 182 days reflects the time period of August 13, 2005 until the mailing date of the corrected Notice of Allowance, February 10, 2006.


Any patent issuing from the present application is not subject to a terminal disclaimer.

The undersigned hereby states that there were no circumstances constituting a failure to engage in reasonable efforts to conclude processing or examination of the subject application as set forth in 36 C.F.R. § 1.704.

Favorable consideration of this request, the issuance of a corrected or supplemental Notice of Allowance, and issuance of a corrected patent term adjustment of 940 days are hereby respectfully solicited.

**This request for reconsideration is being submitted due to a mistake on the part of the Office and thus the undersigned believes that no fee is due.** However, the Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 04-1679.

Respectfully submitted,

By:   
Mark C. Comtois      Reg. No. 46, 285  
D. Joseph English      Reg. No. 42,514  
Patrick D. McPherson Reg. No. 46,255

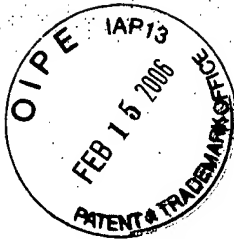
1667 K Street, N.W., Suite 700  
Washington, DC 20006  
Telephone: (202) 776-7800  
Telecopier: (202) 776-7801

Dated: February 15, 2006

DM2\649559.1



## EXHIBIT A



HAR62 001

In re Patent Application of Beadle, et al.

Serial No.: 09/977,362

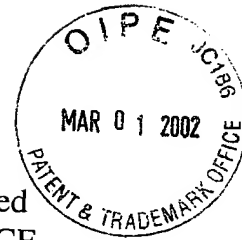
Art Unit: 3662

Filed: October 16, 2001

Examiner: Unassigned

Title: SYSTEM AND METHOD FOR AN IN-SERVICE  
DECISION-DIRECTED SIGNAL TO NOISE RATIO  
ESTIMATOR

Papers enclosed: Two Transmittals, an Information Disclosure Statement  
and copies of the cited references, and a Change of Address for the  
above-identified application.



RECEIVED IN THE U.S. PATENT AND TRADEMARK OFFICE

MAR 01 2002

PTO/SB/122 (10-01)

Approved for use through 10/31/2002. OMB 0651-0035

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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**CHANGE OF  
CORRESPONDENCE ADDRESS**

Application

Address to:  
Assistant Commissioner for Patents  
Washington, D.C. 20231

Application Number	09/977,362
Filing Date	10/16/01
First Named Inventor	Beadle, et al.
Art Unit	3662
Examiner Name	unassigned
Attorney Docket Number	HAR62 001

RECEIVED

Please change the Correspondence Address for the above-identified application to:

☐

Customer Number

Type Customer Number here

MAR 05 2002

Place Customer  
Number Bar Code  
Label here

GROUP 3600

OR

☒Firm or  
Individual Name

Duane Morris LLP

RECEIVED

APR 25 2002

Technology Center 2600

Address

1667 K Street, NW

Address

Suite 700

City

Washington

State

DC

ZIP

20006

Country

Telephone

(202) 776-7800

Fax

(202) 776-7801

This form cannot be used to change the data associated with a Customer Number. To change the data associated with an existing Customer Number use "Request for Customer Number Data Change" (PTO/SB/124).

I am the :

☐

Applicant/Inventor.

☐

Assignee of record of the entire interest.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

☒

Attorney or Agent of record.

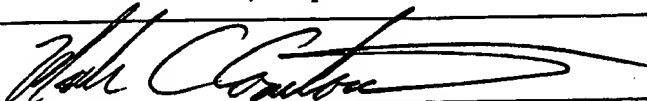
☐

Registered practitioner named in the application transmittal letter in an application without an executed oath or declaration. See 37 CFR 1.33(a)(1). Registration Number \_\_\_\_\_

Typed or Printed  
Name

Mark C. Comtois, Esquire

Signature



Date

March 1, 2002

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐

\*Total of \_\_\_\_\_ forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



## **EXHIBIT B**

## PART B - FEE(S) TRANSMITTAL

Complete and send this form together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 or **Fax** (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise. Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

7590

02/10/2006

Duane Morris LLP  
 1667 K Street, NW  
 Washington, DC 20006

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,362	10/16/2001	Edward R. Beadle	HAR62 001	3384

TITLE OF INVENTION: SYSTEM AND METHOD FOR AN IN-SERVICE DECISION-DIRECTED SIGNAL TO NOISE RATIO ESTIMATOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	05/10/2006

EXAMINER	ART UNIT	CLASS-SUBCLASS
WILLIAMS, LAWRENCE B	2638	375-316000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1	_____
2	_____
3	_____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

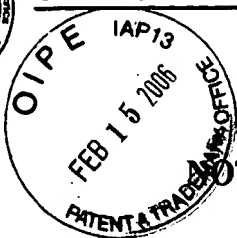
Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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## UNITED STATES PATENT AND TRADEMARK OFFICE



7590

02/10/2006

Duane Morris LLP  
1667 K Street, NW  
Washington, DC 20006

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

## CORRECTED

## NOTICE OF ALLOWANCE AND FEE(S) DUE

EXAMINER

WILLIAMS, LAWRENCE B

ART UNIT

PAPER NUMBER

2638

DATE MAILED: 02/10/2006

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,362	10/16/2001	Edward R. Beadle	HAR62 001	3384

TITLE OF INVENTION: SYSTEM AND METHOD FOR AN IN-SERVICE DECISION-DIRECTED SIGNAL TO NOISE RATIO ESTIMATOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	05/10/2006

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,362	10/16/2001	Edward R. Beadle	HAR62 001	3384

7590  
Duane Morris LLP  
1667 K Street, NW  
Washington, DC 20006

EXAMINER	
WILLIAMS, LAWRENCE B	
ART UNIT	PAPER NUMBER
2638	

DATE MAILED: 02/10/2006

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

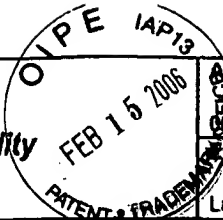
The Patent Term Adjustment to date is 758 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 758 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability



Application No.

09/977,362

Examiner

Lawrence B. Williams

Applicant(s)

BEADLE ET AL

Art Unit

2634

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address—

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 12 April 2005.
2. ☒ The allowed claim(s) is/are 1-8, 15, 17-23, renumbered as 1-8, 9, 10-16, respectively.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

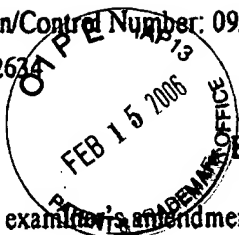
\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 2.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material.
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 2.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_



### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark C. Comtois on 15 June 2001.

The application has been amended as follows:

- I.) In claim 1, line 1, change "the" after estimating to "a".  
In claim 1, line 14, change "the" after producing to "a" in first line of step (e).  
In claim 1, line 19, change "the" between "of" and "imaginary" to "an" in first line of step (h).
- II.) In claim 4, line 2, change "the" after "than" to "a".
- III.) In claim 7, line 2, delete "the" after "of".
- IV.) In claim 15, line 1, change "the" after "estimating" to "a".
- V.) In claim 17, line 1, change "the" after "estimating" to "a".
- VI.) In claim 18, line 1, change "the" after "estimating" to "a".
- VII.) In claim 23, line 1, change "the" after "estimating" to "a".

### REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: The instant application discloses a signal to noise estimator and method for a received signal. A search of prior art records failed to disclose a method for estimating the signal to noise ratio comprising the steps of "(e) producing the complex conjugate of the received signal to provide a conjugate signal; (f) delaying the conjugate signal by a predetermined length of time" along with the remaining limitations of claims 1, 15 and 17, respectively. Nor does the prior art teach a method for estimating the signal to noise ratio of a received signal, the improvement including the step of eliminating the real component of the combination of the received signal and the delayed conjugate of the received signal" along with the remaining limitations of claim 18. The prior art also fails to disclose a signal to noise ratio estimator comprising; "means for producing a complex conjugate signal of the received signal; delaying means for delaying the complex conjugate signal for a predetermined duration" along with the remaining limitations of claim 19. The prior art also fails to disclose a method for estimating the signal to noise ratio of a received signal, the improvement including the step of "producing the signal power estimate by combining a demodulated bit sequence of the communication signal component with samples of a delay discriminator output" along with the remaining limitations of claim 23.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### DRAWINGS

2. This application has been filed with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

### *Conclusion*

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw  
June 15, 2005



KENNETH VANDERPUYE  
PRIMARY EXAMINER



# Examiner-Initiated Interview Summary

Application No.

09/977,362

Applicant

BEADLE ET AL

Examiner

Lawrence B. Williams

Art Unit

2634

**All Participants:**Status of Application: Allowance(1) Lawrence B. Williams.

(3) \_\_\_\_\_.

(2) Mark C. Comtois.

(4) \_\_\_\_\_.

Date of Interview: 15 June 2001Time: 4:00 PM**Type of Interview:**

- ☒ Telephonic  
☐ Video Conference  
☐ Personal (Copy given to: ☐ Applicant ☐ Applicant's representative)

Exhibit Shown or Demonstrated: ☐ Yes ☐ No

If Yes, provide a brief description:

**Part I.**

Rejection(s) discussed:

Claims discussed:

Prior art documents discussed:

**Part II.****SUBSTANCE OF INTERVIEW DESCRIBING THE GENERAL NATURE OF WHAT WAS DISCUSSED:***Minor grammatical corrections required***Part III.**

- ☒ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview directly resulted in the allowance of the application. The examiner will provide a written summary of the substance of the interview in the Notice of Allowability.
- ☐ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview did not result in resolution of all issues. A brief summary by the examiner appears in Part II above.

(Examiner/SPE Signature)

(Applicant/Applicant's Representative Signature – if appropriate)

<b>Notice of References Cited</b>	Application/Control No. 09/977,362	Applicant(s)/Patent Under Reexamination BEADLE ET AL.	
	Examiner Lawrence B. Williams	Art Unit 2634	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,081,822 A	06-2000	Hillery et al.	708/445
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

## **EXHIBIT C**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

**CORRECTED**  
**NOTICE OF ALLOWANCE AND FEE(S) DUE**

RECEIVED  
DUANE MORRIS, LLP

FEB 13 2006

7590

02/10/2006

Duane Morris LLP  
1667 K Street, NW  
Washington, DC 20006

EXAMINER

WILLIAMS, LAWRENCE B

ART UNIT

PAPER NUMBER

2638

DATE MAILED: 02/10/2006

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,362	10/16/2001	Edward R. Beadle	HAR62 001	3384

TITLE OF INVENTION: SYSTEM AND METHOD FOR AN IN-SERVICE DECISION-DIRECTED SIGNAL TO NOISE RATIO ESTIMATOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	05/10/2006

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.**

**HOW TO REPLY TO THIS NOTICE:**

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



# UNITED STATES PATENT AND TRADEMARK OFFICE

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www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,362	10/16/2001	Edward R. Beadle	HAR62 001	3384
7590 02/10/2006				
Duane Morris LLP 1667 K Street, NW Washington, DC 20006				
EXAMINER WILLIAMS, LAWRENCE B				
ART UNIT PAPER NUMBER				
2638				
DATE MAILED: 02/10/2006				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 758 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 758 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

DOCKETED

Corr. Docs  
Jus  
5-10-06  
Pay Issue Fee  
5-10-06  
Report  
2-16-06

RECEIVED  
DUANE MORRIS, LLP  
FEB 13 2006